

ABSTRACT OF THE DISCLOSURE

The invention relates to a seal structure of a fuel cell unit which permits easier rebuilding (reassembling) and recycling of the fuel cell unit, and a manufacturing method of the same structure. The seal structure includes a plurality of components of the fuel cell unit, which are stacked; a sealant which is made of a material selected from a gel material, high viscosity material and pressure-sensitive adhesive material, and which maintains an initial material state thereof even under an environment where the fuel cell unit is used; and a retaining portion formed at the components which sandwiches the sealant with another component, so as to prevent the sealant from moving. Also, the process of hardening the sealant is performed as a process, which is different from and precedes the process of stacking the components.